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FRUITS ATTRACTIVE TO BIRDS - SOUTHWESTERN STATES
REGION NO. 7

[Arizona and New Mexico]

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REGIONS FOR WHICH LEAFLETS ON FRUITS ATTRACTIVE TO BIRDS ARE AVAILABLE

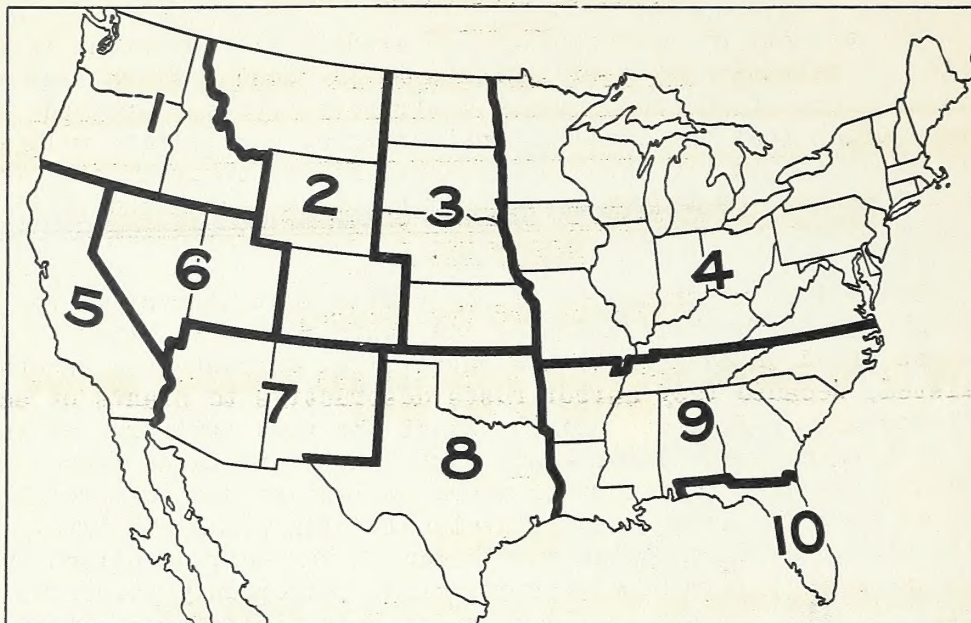


FIGURE 1.--Map of the United States, showing the 10 regions used in presenting information on fruits attractive to birds.

As an aid in requesting leaflets, it should be noted that No. BS-41 is for region 1; BS-42, for region 2, etc., with BS-50 for region 10.

INTRODUCTION

The effects of elevation and of aridity are important in controlling distribution of native plants in the Southwestern States. Recommendations of the most widely distributed species are made with the assumption that the favoring influences of cultivation will enable plants to survive outside of their native environment. The extralimital species listed have of course been tested and their hardiness under the prevailing conditions demonstrated.

Table 1 shows groups of fleshy fruits most attractive to birds throughout the United States and lists desirable kinds of birds most fond of the fruit. No barberries, currants, or buckthorns are listed, because they harbor rusts destructive to plants of economic importance. Junipers are in almost the same category, as they serve as alternate hosts for apple rust, but there is no reason why they cannot be used in districts where apples are not commercially grown, as they are among the most valuable plants for wildlife. Omitted also are plants poisonous to man on contact, as poison ivy and poison sumac, as well as various kinds dangerously poisonous to domestic animals, as yews, wild cherries, and nightshades, in spite of the fact that wild cherries are greatly relished by birds. Browsing animals are known to have been killed by feeding on the leaves of wild cherries but do not seem to be so seriously affected by those of plums. Certain plants included among fleshy fruit bearers in previous publications have been transferred to the list of seed producers, hence do not appear in the present series of leaflets. These include magnolia (Magnolia), bittersweet (Celastrus), and burningbush (Euonymus).

It should be noted that the fruit-bearing seasons recorded, being collected from varied sources, tend to be maxima. As a rule they are not likely to be realized or even approached in a single locality unless numerous specimens of a given species are present and so distributed in sun and shade as to favor both early and late fruiting.

The word "extralimital" as here used in certain table headings covers plants from other States or regions of the United States as well as wholly introduced, exotic, or foreign plants.

TABLE 1. - Groups of fleshy fruits^{1/} most attractive to birds throughout the
United States

Name of fruit		Species of birds known to eat the fruit	
Common	Generic	Number	Desirable kinds most fond of the fruit
Juniper; redcedar ^{3/}	Juniperus	50	Flicker, mockingbird, robin, eastern bluebird, cedar waxwing, myrtle warbler, evening and pine grosbeaks, purple finch.
Greenbrier	Smilax	43	Mockingbird, catbird, brown thrasher, robin, hermit thrush, cardinal.
Bayberry	Myrica	85	Bobwhite, flicker, downy woodpecker, eastern phoebe, tree swallow, black-capped chickadee, Carolina wren, catbird, brown thrasher, hermit thrush, eastern bluebird, white-eyed vireo, myrtle warbler, meadowlark, towhee.
Hackberry	Celtis	47	Flicker, yellow-bellied sapsucker, mockingbird, brown thrasher, robin, eastern bluebird, cedar waxwing, cardinal.
Mulberry	Morus	59	Yellow-billed cuckoo, red-bellied, red-headed, and downy woodpeckers, eastern kingbird, mockingbird, catbird, robin, wood thrush, cedar waxwing, red-eyed vireo, yellow warbler, orchard and Baltimore orioles, scarlet tanager, cardinal, purple finch.
Pokeberry	Phytolacca ...	52	Mourning dove, flicker, eastern kingbird, mockingbird, catbird, robin, hermit, olive-backed, and gray-cheeked thrushes, eastern bluebird, cardinal.
Spicebush	Benzoin	17	Eastern kingbird, wood thrush, veery, red-eyed vireo.
Sassafras	Sassafras	18	Bobwhite, eastern kingbird, catbird, robin, veery, red-eyed vireo.
Strawberry	Fragaria	52	Catbird, brown thrasher, robin, wood thrush, towhee.

TABLE 1. - Groups of fleshy fruits most attractive to birds throughout the United States--Continued

Name of fruit		Num- ber	Species of birds known to eat the fruit
Common	Generic		Desirable kinds most fond of the fruit
Raspberry, black- berry	Rubus	146	Ruffed grouse, bobwhite, flicker, red-headed woodpecker, eastern kingbird, tufted titmouse, wren tit, mockingbird, catbird, brown thrasher, robin, wood and olive-backed thrushes, eastern bluebird, cedar waxwing, red-eyed vireo, orchard and Baltimore orioles, cardinal, rose-breasted, black-headed, and pine grosbeaks, red-eyed, spurred, and California towhees, white-throated, fox, and song sparrows.
Rose	Rosa	38	Ruffed and sharp-tailed grouse, prairie chicken, bobwhite.
Mountain-ash	Sorbus	13	Red-headed woodpecker, catbird, brown thrasher, robin, Bohemian and cedar waxwings, Baltimore oriole, evening and pine grosbeaks.
Chokeberry	Aronia	21	Brown thrasher, meadowlark.
Hawthorn	Crataegus ...	39	Ruffed grouse, robin, purple finch, pine grosbeak.
Apple	Malus	43	Ruffed grouse, ring-necked pheasant, mockingbird, robin, cedar waxwing, purple finch, pine grosbeak, red crossbill.
Juneberry	Amelanchier .	42	Flicker, catbird, robin, hermit thrush, veery, cedar waxwing, Baltimore oriole.
Sumac ^{4/}	Rhus	97	Ruffed grouse, bobwhite, valley quail, northern and red-shafted flickers, red-bellied and downy woodpeckers, phoebe, black-capped and Carolina chickadees, wren tit, Carolina wren, mockingbird, catbird, brown and California thrashers, robin, hermit thrush, eastern bluebird, white-eyed vireo, towhee, Audubon's warbler, goldfinch, golden-crowned sparrow.
Pepperberry	Schinus	12	Robin, varied and hermit thrushes, cedar waxwing, phainopepla.

TABLE 1. - Groups of fleshy fruits most attractive to birds throughout the United States--Continued

Name of fruit		Species of birds known to eat the fruit	
Common	Generic	Number	Desirable kinds most fond of the fruit
Holly	Ilex	48	Ruffed grouse, bobwhite, valley quail, flicker, yellow-bellied sapsucker, mockingbird, catbird, brown thrasher, robin, hermit thrush, eastern bluebird, cedar waxwing.
Supplejack.....	Berchemia ...	15	Mockingbird, robin.
Grape	Vitis	87	Ruffed grouse, bobwhite, northern and red-shafted flickers, pileated and red-bellied woodpeckers, eastern kingbird, mockingbird, catbird, brown thrasher, robin, wood thrush, veery, eastern and western bluebirds, cedar waxwing, cardinal.
Virginia creeper .	Ampelopsis ..	38	Flicker, red-bellied and red-headed woodpeckers, yellow-bellied sapsucker, tufted titmouse, mockingbird, brown thrasher, robin, hermit, olive-backed, and gray-cheeked thrushes, eastern bluebird, red-eyed vireo, scarlet tanager, evening grosbeak, purple finch.
Buffaloberry	Shepherdia ..	18	Sharp-tailed grouse, pine grosbeak.
Silverberry, Russian olive, etc.	Elaeagnus ...	5/	Prairie chicken, sharp-tailed grouse, catbird, robin, cedar waxwing.
Wild-sarsaparilla	Aralia	16	Bobwhite, robin.
Dogwood	Cornus	93	Ruffed grouse, bobwhite, northern and red-shafted flickers, downy woodpecker, eastern kingbird, catbird, brown thrasher, robin, wood, hermit, olive-backed, and gray-cheeked thrushes, eastern bluebird, cedar waxwing, red-eyed and warbling vireos, cardinal, evening and pine grosbeaks, purple finch, white-throated and song sparrows.
Sourgum, tupelo ..	Nyssa	39	Flicker, robin, olive-backed and gray-cheeked thrushes, cedar waxwing, purple finch.
Crowberry	Empetrum	40	Pine grosbeak, snow bunting.
Bearberry, manzanita	Arctostaphylos	34	Dusky and ruffed grouse, valley and mountain quail, wren tit, fox sparrow.

TABLE 1. - Groups of fleshy fruits most attractive to birds throughout the United States--Continued

Name of fruit		Num- ber	Species of birds known to eat the fruit
Common	Generic		Desirable kinds most fond of the fruit
Wintergreen	Gaultheria ..	10	Ruffed grouse, wren tit.
Huckleberry	Gaylussacia ..	46	Robin, pine grosbeak, towhee.
Blueberry	Vaccinium ...	93	Ruffed grouse, valley quail, eastern kingbird, black-capped chickadee, tufted titmouse, catbird, brown thrasher, robin, hermit thrush, eastern bluebird, cedar waxwing, orchard oriole, pine grosbeak, towhee.
Beautyberry	Callicarpa ..	11	Mockingbird, brown thrasher.
Partridgeberry ...	Mitchella ...	10	Ruffed grouse.
Elderberry	Sambucus	118	Valley quail, flicker, red-headed woodpecker, eastern and Arkansas kingbirds, black phoebe, wren tit, mockingbird, catbird, brown and California thrashers, robin, olive-backed thrush, eastern and western bluebirds, phainopepla, red-eyed vireo, rose-breasted and black-headed grosbeaks, California towhee, white-crowned sparrow.
Snowberry, coral- berry	Symphoricarpos	33	Sharp-tailed grouse, varied thrush, evening and pine grosbeaks.
Blackhaw, cran- berrybush	Viburnum	35	Ruffed grouse, yellow-billed cuckoo, flicker, catbird, brown thrasher, robin, eastern bluebird, cedar waxwing, rose-breasted grosbeak, purple finch.
Honeysuckle	Lonicera	18	Bobwhite, catbird, brown thrasher, robin, hermit thrush, pine grosbeak, white-throated sparrow.

^{1/} Barberries (*Berberis*), buckthorns (*Rhamnus*), and currants (*Ribes*) are omitted because they serve as alternate hosts of rusts, attacking wheat, oats, and white pine, respectively. Yews (*Taxus*), wild cherries (*Prunus*), and nightshades (*Solanum*) also are omitted as being dangerous stock poisoning plants.

^{2/} When 10 or more.

^{3/} Carries apple rust; should not be planted near valuable orchards.

^{4/} Only nonpoisonous species of sumac are considered.

^{5/} Data given are based entirely on field observations; total number of birds eating the various species of *Elaeagnus* unknown.

TABLE 2.--Generally distributed native fruits of Arizona and New Mexico
for which satisfactory data on fruiting seasons are available

Common name	Scientific name	Fruiting season
Alligator juniper.....	<i>Juniperus pachyphloea</i>	All year.
Colorado juniper.....	<i>Juniperus scopulorum</i>	All year.
Utah juniper.....	<i>Juniperus utahensis</i>	All year.
Cherrystone juniper.....	<i>Juniperus monosperma</i>	All year.
Palo blanco.....	<i>Celtis reticulata</i>	Mid-May to late December.
Mulberry.....	<i>Morus microphylla</i>	Mid-May to late July.
Wild rose.....	<i>Rosa fendleri</i>	All year.
Arizona red raspberry....	<i>Rubus arizonicus</i>	Late July to mid-October.
White-flowering raspberry	<i>Rubus parviflorus</i>	July
Sumac.....	<i>Rhus emoryi</i>	Mid-April to late September.
Do.....	<i>Rhus microphylla</i>	Early May to mid-October.
Lote-bush.....	<i>Zizyphus lycioides</i>	All year.
Black ironwood.....	<i>Condalia spathulata</i>	Mid-July to late August.
Canyon grape.....	<i>Vitis arizonica</i>	Mid July to early November.
Thicket creeper.....	<i>Ampelopsis vitacea</i>	Early July to late December.
Dogwood.....	<i>Cornus instolonea</i>	Late June to late December.
Madrone.....	<i>Arbutus arizonica</i>	Mid-July to late December.
Manzanita.....	<i>Arctostaphylos pungens</i>	Mid-July to late April.
Bearberry.....	<i>Arctostaphylos uva-ursi</i>	Early July to late April.
Adelia.....	<i>Forestiera neomexicana</i>	Mid-June to mid-March.
Tomatilla.....	<i>Lycium torreyi</i>	Mid-June to early September.
Elderberry.....	<i>Sambucus mexicana</i>	Late May to late October.
Snowberry.....	<i>Symphoricarpos rotundifolis</i>	Early August to late December.
Do.....	<i>Symphoricarpos oreophilus</i> ..	Early August to late December.
Honeysuckle.....	<i>Lonicera dumosa</i>	Early June to late December.

TABLE 3.--Native fruits of Arizona and New Mexico for which less
satisfactory data on fruiting seasons are available

Common name	Scientific name	Remarks
Strawberry.....	<i>Fragaria americana</i>	
Do.....	<i>Fragaria ovalis</i>	
Wild rose.....	<i>Rosa suffulta</i>	
Do.....	<i>Rosa maximiliani</i>	
Do.....	<i>Rosa neomexicana</i>	
Mountain-ash.....	<i>Sorbus scopulina</i>	Fruit long persistent.
Serviceberry.....	<i>Amelanchier oreophila</i>	
Do.....	<i>Amelanchier polycarpa</i>	

TABLE 3.--Native fruits of Arizona and New Mexico for which less satisfactory data on fruiting seasons are available--Continued

Common name	Scientific name	Remarks
Hawthorn.....	<i>Crataegus rivularis</i>	
Do.....	<i>Crataegus erythropoda</i>	
Sumac.....	<i>Rhus lanceolata</i>	
Buffaloberry.....	<i>Shepherdia argentea</i>	For the northern part or elevated regions.
Do.....	<i>Shepherdia canadensis</i>	Do.
Wild sarsaparilla.....	<i>Aralia bicrenata</i>	
Adelia.....	<i>Forestiera pubescens</i>	
Bumelia.....	<i>Bumelia rigida</i>	
Madrone.....	<i>Arbutus texana</i>	
Allthorn.....	<i>Koeberlinia spinosa</i>	
Blueberry.....	<i>Vaccinium oreophilum</i>	
Whortleberry.....	<i>Vaccinium scoparium</i>	
Tomatilla.....	<i>Lycium parviflorum</i>	
Do.....	<i>Lycium pallidum</i>	
Elderberry.....	<i>Sambucus microbotrys</i>	
Do.....	<i>Sambucus melanocarpa</i>	
Do.....	<i>Sambucus neomexicana</i>	August.
Do.....	<i>Sambucus vestita</i>	
Honeysuckle.....	<i>Lonicera arizonica</i>	
Do.....	<i>Lonicera utahense</i>	
Do.....	<i>Lonicera involucrata</i>	July.

TABLE 4.--Extralimital fruits that have been recommended for Arizona

(S indicates those for the south or for elevations under 3000 feet)

Common name	Scientific name	Remarks
Washington palm.....	<i>Washingtonia filifera</i>	S.
Canary date palm.....	<i>Phoenix canariensis</i>	S.
Blue palm.....	<i>Glaucotheca armata</i>	S.
Brandegge palm.....	<i>Erythea brandegei</i>	S.
Red mulberry.....	<i>Morus rubra</i>	
White mulberry.....	<i>Morus alba</i>	
Russian mulberry.....	<i>Morus alba tatarica</i>	
Chinaberry.....	<i>Melia azedarach</i>	Fruit from mid-June to mid-winter.
Peppertree.....	<i>Schinus molle</i>	S.
Virginia creeper.....	<i>Ampelopsis quinquefolia</i>	
Japanese creeper.....	<i>Ampelopsis tricuspidata</i> ...	
Russian olive.....	<i>Elaeagnus angustifolia</i>	
Myrtle.....	<i>Myrtus communis</i>	S.
California privet.....	<i>Ligustrum ovalifolium</i>	
Japanese honeysuckle.....	<i>Lonicera japonica</i>	

TABLE 5.--Extralimital fruits that have been recommended for New Mexico

Common name	Scientific name	Remarks
Redcedar.....	<i>Juniperus virginiana</i>	
Russian mulberry.....	<i>Morus alba tatarica</i>	
Purpleleaf plum.....	<i>Prunus pissardi</i>	
Wild plum.....	<i>Prunus americana</i>	
Chinaberry.....	<i>Melia azedarach</i>	Fruit from mid-June to mid-winter.
Virginia creeper.....	<i>Ampelopsis quinquefolia</i>	
Russian olive.....	<i>Elaeagnus angustifolia</i>	
California privet.....	<i>Ligustrum ovalifolium</i>	
Japanese privet.....	<i>Ligustrum japonicum</i>	
Matrimony-vine.....	<i>Lycium halimifolium</i>	
Japanese honeysuckle.....	<i>Lonicera japonica</i>	
China honeysuckle.....	<i>Lonicera chinensis</i>	
Tatarian honeysuckle.....	<i>Lonicera tatarica</i>	

LITERATURE

Publications of interest in connection with fruits for the Southwestern States include:

Flora of New Mexico, by E. O. Wootton and Paul C. Standley. Contributions from the National Herbarium 19, 794 pp., 1915. Published by the Smithsonian Institution, Washington, D. C.

Inquire as to conditions governing distribution of the following Press Bulletins from the College of Agriculture and Mechanic Arts, State College, New Mexico.

Broad-leaved evergreens of New Mexico, by Mary Orr. Agr. Expt. Sta. Press Bull. 713, 714, each 2 pp., mimeographed, March 1934.

New Mexico native shrubs with conspicuous fruits, by Mary Orr. Agr. Expt. Sta. Press Bull. 716, 2 pp., mimeographed, March 1934.

Native vines of New Mexico, by Mary Orr. Agr. Expt. Sta. Press Bull. 717, 2 pp., mimeographed, March 1934.